

Title (en)
SINGLE-PHASE BRUSHLESS MOTOR

Title (de)
EINPHASIGER BÜRSTENLOSER MOTOR

Title (fr)
MOTEUR SANS BALAIS MONOPHASÉ

Publication
EP 3062426 A1 20160831 (EN)

Application
EP 16156849 A 20160223

Priority
• CN 201510090157 A 20150227
• CN 201520426013 U 20150618

Abstract (en)
The present invention provides a single-phase motor, comprising a stator and a rotor. The stator comprises a stator magnetic core (3) and a winding (5) wound on the stator magnetic core (3), the stator magnetic core (3) comprises an annular yoke (31) and a plurality of teeth (32) extending inwards from the yoke (31), crowns (321) extending circumferentially are formed at the tail ends of the teeth (32) that are far away from the yoke (31), the crowns (321) of the adjacent teeth (32) are interconnected to form an annular portion (33), the winding (5) is wound on the corresponding teeth (32), the rotor is accommodated in the annular portion (33) of the stator magnetic core (3), the rotor comprises a rotor magnetic core (6) and permanent-magnet poles (71), the rotor magnetic core (6) is provided with a plurality of grooves (61), each permanent-magnet pole (71) is disposed within the corresponding groove (61), and slots (62) are formed in positions on the peripheral surface of the rotor magnetic core (6) that correspond to the grooves (61).

IPC 8 full level
H02K 29/03 (2006.01); **H02K 1/14** (2006.01); **H02K 1/27** (2006.01); **H02K 7/04** (2006.01); **H02K 29/08** (2006.01)

CPC (source: EP US)
H02K 1/148 (2013.01 - EP US); **H02K 1/2753** (2013.01 - US); **H02K 1/2773** (2013.01 - EP US); **H02K 7/04** (2013.01 - EP US); **H02K 11/21** (2016.01 - US); **H02K 21/02** (2013.01 - US); **H02K 29/03** (2013.01 - EP US); **H02K 29/08** (2013.01 - EP US)

Citation (search report)
• [Y] US 2015042194 A1 20150212 - LI YUE [CN], et al
• [Y] EP 2658091 A2 20131030 - SAMSUNG ELECTRO MECH [KR]
• [Y] EP 2416472 A1 20120208 - FUJITSU GENERAL LTD [JP]
• [Y] EP 1391980 A2 20040225 - LG ELECTRONICS INC [KR]
• [A] EP 1372250 A2 20031217 - ELCO SPA [IT]
• [A] US 2013038165 A1 20130214 - PAN MINGPAN [CN]
• [A] US 2013038162 A1 20130214 - PAN MINGPAN [CN]

Cited by
CN109494897A; EP3923454A4

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3062426 A1 20160831; BR 102016003845 A2 20161004; JP 2016174521 A 20160929; KR 20160105342 A 20160906; MX 2016002570 A 20160826; US 2016254715 A1 20160901

DOCDB simple family (application)
EP 16156849 A 20160223; BR 102016003845 A 20160223; JP 2016035290 A 20160226; KR 20160023371 A 20160226; MX 2016002570 A 20160226; US 201615055453 A 20160226